

NONREIMBURSABLE SPACE ACT AGREEMENT  
BETWEEN  
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
GODDARD SPACE FLIGHT CENTER  
AND HOWARD UNIVERSITY  
FOR  
JOINT COLLABORATIVE FRAMEWORK FOR EARTH SCIENCE STUDIES

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)), this Agreement is entered into by the National Aeronautics and Space Administration Goddard Space Flight Center, located at 8800 Greenbelt Road, Greenbelt, Maryland 20771 (hereinafter referred to as "NASA" or "NASA GSFC" or "GSFC") and Howard University located at 2355 Sixth Street, NW, Washington, DC 20059-0000 (hereinafter referred to as "Partner" or "Howard" or "HU"). NASA and Howard may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

NASA GSFC and Howard University wish to formalize and strengthen existing ties between said institutions in order to enhance scientific research, student training, and workforce development in areas of mutual interest to Howard University and NASA GSFC's Earth Science Division with particular emphasis on activity being conducted at the Howard University at the North Campus at Beltsville and at the Downtown Campus (e.g., the Interdisciplinary Research Building). The purpose of this Space Act Agreement (SAA) is to provide a mechanism for the development of activities that will lead to the strengthening and growth of mutually beneficial educational, research, and operational programs conducted jointly and independently by HU and GSFC. The direct benefit to NASA is twofold: (1) it provides a leveraging opportunity for a rich data set that has applications to the ground-based networks at NASA and implications for satellite and chemical transport model evaluation and (2) it better aligns with workforce diversity goals by setting up a partnership where underrepresented students are able to be entrained into NASA while simultaneously completing their graduate work, all while having joint mentorship with their Howard University advisor and NASA mentors.

ARTICLE 3. RESPONSIBILITIES

A. NASA/GSFC will use reasonable efforts to:

1. Provide a single NASA Point of Contact, who will work with HU, to identify the opportunities mentioned below.
2. Collaborate with HU to plan programs that include NASA speakers, materials, information and exhibits, technical workshops symposia etc. Plan and execute one event each calendar year.

3. Actively participate in job fairs and career development programs to ensure students understand the broad scope of opportunities in the aerospace industry.
4. Identify research and engineering projects, initiatives and collaborative activities located at NASA GSFC that are designed to provide HU students and professors with focused opportunities to volunteer their support and engage in experiential hands-on activities at NASA GSFC under the direction of NASA GSFC scientists and engineers.
5. Provide administrative support in the coordination of logistics associated with badging, usage of laboratories or government property and associated tours or shadowing opportunities.
6. Provide information and guidance to HU students on internships and career opportunities at NASA GSFC.
7. Provide technical expertise to advise on engineering curriculum, as HU develops courses of study to meet the needs of the aerospace community.

B. Howard will use reasonable efforts to:

1. Provide a single HU Point of Contact, who will work with NASA GSFC, to identify the opportunities mentioned below.
2. Identify academically qualified HU students and professors for voluntary participation in the activities described above.
3. Ensure that all HU students and personnel abide by Agency policies, regulations and requirements.
4. Collaborate with GSFC to plan programs on campus to include NASA speakers, materials, information and exhibits, technical workshops, symposia and other knowledge-sharing events.
5. Include GSFC in job fairs and career development programs to ensure students understand the broad scope of opportunities in the aerospace industry.
6. Collaborate on development of curriculum that improves the pipeline as well as continuing education for NASA employees.
7. Provide teaching and speaking opportunities for NASA staff as well as HU faculty for the opportunity to share new knowledge between the organizations when of mutual benefit.

#### ARTICLE 4. SCHEDULE AND MILESTONES

The planned major milestones for the activities defined in the “Responsibilities” clause are as follows:

Responsibility/Milestone	Schedule
Development of programs for academic research, training, and educational exchange	Parties will annually review the status of cooperative activities and define milestones
HU and GSFC will provide guidance to steering committees or faculty meetings	Once per year as needed
HU and GSFC researchers will present findings at seminars and larger national conferences to increase visibility of partnership	Once per year as needed
Participate and provide instruction and/or instrumentation for upcoming Workshops	Summer 2022 and beyond (funding dependent)
HU and GSFC will mentor students and post-doctoral fellows on how to better submit proposals to NASA	Once per year as needed

#### ARTICLE 5. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

#### ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this Agreement is estimated based upon the Parties' current understanding of the projected availability of NASA goods, services, facilities, or equipment. In the event that NASA's projected availability changes, Partner shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of the goods, services, facilities, or equipment shall have priority over the use planned in this Agreement. Should a conflict arise, NASA in its sole discretion shall determine whether to exercise that priority. Likewise, should a conflict arise as between two or more non-NASA Partners, NASA, in its sole discretion, shall determine the priority as between those Partners. This Agreement does not obligate NASA to seek alternative government property or services under the jurisdiction of NASA at other locations.

#### ARTICLE 7. NONEXCLUSIVITY

This Agreement is not exclusive; accordingly, NASA may enter into similar agreements for the same or similar purpose with other private or public entities.

## ARTICLE 8. LIABILITY AND RISK OF LOSS

A. Each Party hereby waives any claim against the other Party or one or more of its Related Entities (defined below) for any injury to, or death of, the waiving Party or one or more of its Related Entities, or for damage to, or loss of, the waiving Party's property or the property of its Related Entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.

B. Partner further agrees to extend this waiver to its related entities by requiring them, by contract or otherwise, to waive all claims against NASA and its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. For purposes of this Agreement, "Related Entities" shall mean contractors and subcontractors of a Party at any tier; grantees, investigators, customers, and users of a Party at any tier and their contractors or subcontractor at any tier; or, employees of the Party or any of the foregoing.

C. Notwithstanding the other provisions of this Article, the waivers of liability set forth in this section shall not be applicable to:

- i. Claims between a Party and its own Related Entity or between its own Related Entities;
- ii. Claims made by a natural person, his/her estate, survivors, or anyone claiming by or through him/her (except when such person or entity is a Party to this Agreement or is otherwise bound by the terms of this waiver) for bodily injury to, or other impairment of health of, or death of, such person;
- iii. Claims for damage caused by willful misconduct;
- iv. Intellectual property claims;
- v. Claims for damage resulting from a failure of a Party to extend the waiver of liability to its Related Entities, pursuant to paragraph B of this Article; or
- vi. Claims by a Party arising out of or relating to another Party's failure to perform its obligations under this Agreement.

## ARTICLE 9. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

Information and data exchanged under this Agreement is exchanged without restrictions unless required by national security regulations (e.g., classified information) or as otherwise provided in this Agreement or agreed to by the Parties for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice).

## ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS - RIGHTS IN RAW DATA GENERATED UNDER THE AGREEMENT

### 1. Raw Data

Raw data (i.e., unanalyzed data) and related Data produced under this Agreement are reserved to Principal Investigators (and Co-Investigators if any) named in this Agreement for scientific analysis and first publication rights for 6 months beginning with receipt of

the Data in a form suitable for analysis. Subject to the provisions of the Intellectual Property Rights - Data Rights Article of this Agreement, NASA and Partner may also use the Data during the restricted period. This use will not prejudice the investigators' first publication rights.

## 2. Final Results

(a) Final results shall be made available to the scientific community through publication in appropriate journals or other established channels as soon as practicable and consistent with good scientific practice. Under the Publication of Results provision of the Intellectual Property Rights - Data Rights clause of this Agreement, the Parties shall coordinate proposed publications allowing a reasonable time for review and comment.

(b) NASA and Partner have a royalty-free right to reproduce, distribute, and use published final results for any purposes. Partner must notify publisher of NASA's rights.

## ARTICLE 11. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

A. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement.

B. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

C. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent rights are exchanged or granted under this Agreement. NASA and Partner will use reasonable efforts to report inventions made jointly by their employees (including employees of their Related Entities). The Parties will consult and agree on the responsibilities and actions to establish and maintain patent protection for joint invention, and on the terms and conditions of any license or other rights exchanged or granted between them.

## ARTICLE 12. USE OF NASA NAME AND NASA EMBLEMS

### A. NASA Name and Initials

Partner shall not use "National Aeronautics and Space Administration" or "NASA" in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the "Release of General Information to the Public and Media" Article, Partner must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to the NASA Associate Administrator for the

Office of Communications or designee ("NASA Communications") for review and approval. Approval by NASA Office of Communications shall be based on applicable law and policy governing the use of the NASA name and initials.

#### B. NASA Emblems

Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. Partner must submit any proposed use of the emblems to NASA Communications for review and approval.

### ARTICLE 13. RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or Partner may, consistent with Federal law and this Agreement, release general information regarding its own participation in this Agreement as desired.

Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that a copy of this Agreement will be disclosed, without redactions, in accordance with the NTAA.

### ARTICLE 14. DISCLAIMER OF WARRANTY

Goods, services, facilities, or equipment provided by NASA under this Agreement are provided "as is." NASA makes no express or implied warranty as to the condition of any such goods, services, facilities, or equipment, or as to the condition of any research or information generated under this Agreement, or as to any products made or developed under or as a result of this Agreement including as a result of the use of information generated hereunder, or as to the merchantability or fitness for a particular purpose of such research, information, or resulting product, or that the goods, services, facilities or equipment provided will accomplish the intended results or are safe for any purpose including the intended purpose, or that any of the above will not interfere with privately-owned rights of others. Neither the government nor its contractors shall be liable for special, consequential or incidental damages attributed to such equipment, facilities, technical information, or services provided under this Agreement or such research, information, or resulting products made or developed under or as a result of this Agreement.

### ARTICLE 15. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or provision of goods, services, facilities or equipment under this Agreement does not constitute endorsement by NASA. Partner agrees that nothing in this Agreement will be construed to imply that NASA authorizes, supports, endorses, or sponsors any product or service of Partner resulting from activities

conducted under this Agreement, regardless of the fact that such product or service may employ NASA-developed technology.

#### ARTICLE 16. COMPLIANCE WITH LAWS AND REGULATIONS

A. The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access.

B. With respect to any export control requirements:

1. The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Annex to this Agreement. In the absence of available license exemptions or exceptions, the Partner shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data and software, or for the provision of technical assistance.

2. The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Annex under this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.

3. The Partner will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.

4. The Partner will be responsible for ensuring that the provisions of this Article apply to its Related Entities.

C. With respect to suspension and debarment requirements:

1. The Partner hereby certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R. Part 180, Subpart C, as supplemented by 2 C.F.R. Part 1880, Subpart C.

2. The Partner shall include language and requirements equivalent to those set forth in subparagraph C.1., above, in any lower-tier covered transaction entered into under this Agreement.

#### ARTICLE 17. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties

hereto, or five years from the Effective Date, whichever comes first.

#### ARTICLE 18. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party.

#### ARTICLE 19. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., "Liability and Risk of Loss" and "Intellectual Property Rights"-related clauses shall survive such expiration or termination of this Agreement.

#### ARTICLE 20. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

##### Management Points of Contact

NASA Goddard Space Flight Center  
Matthew McGill  
Director, Earth Sciences Division  
Mail Stop: 610.0  
8800 Greenbelt Road  
Greenbelt, Maryland 20771  
Phone: 301-614-6281  
[matthew.j.mcgill@nasa.gov](mailto:matthew.j.mcgill@nasa.gov)

Howard University  
Dana C. Hector, CRA  
Executive Director for Research  
Research Administrative Services  
Attn: Contracts Team  
525 Bryant Street, NW, Suite 137  
Washington, DC 20059  
Phone: (202) 806-4759  
Fax: (202) 483-8042  
[dhector@howard.edu](mailto:dhector@howard.edu)

##### Principal Investigator Point of Contact

NASA Goddard Space Flight Center  
John T. Sullivan  
Research Scientist  
Mail Stop: 614.0  
8800 Greenbelt Road  
Greenbelt, Maryland 20771  
Phone: 301-614-6657  
[John.t.sullivan@nasa.gov](mailto:John.t.sullivan@nasa.gov)

Howard University  
Charles Ichoku  
Professor of Earth and Atmospheric  
Sciences in the Department  
of Interdisciplinary Studies within the  
College of Arts and Sciences (COAS)  
Washington, DC 20059  
Phone: (202) 865-8545  
[charles.ichoku@howard.edu](mailto:charles.ichoku@howard.edu)

## ARTICLE 21. DISPUTE RESOLUTION

Except as otherwise provided in the Article entitled "Priority of Use," the Article entitled "Intellectual Property Rights – Invention and Patent Rights" (for those activities governed by 37 C.F.R. Part 404), and those situations where a pre-existing statutory or regulatory system exists (e.g., under the Freedom of Information Act, 5 U.S.C. § 552), all disputes concerning questions of fact or law arising under this Agreement shall be referred by the claimant in writing to the appropriate person identified in this Agreement as the "Points of Contact." The persons identified as the "Points of Contact" for NASA and the Partner will consult and attempt to resolve all issues arising from the implementation of this Agreement. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this Agreement, or their designees, for joint resolution. If the Parties remain unable to resolve the dispute, then the NASA signatory or that person's designee, as applicable, will issue a written decision that will be the final agency decision for the purpose of judicial review. Nothing in this Article limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

## ARTICLE 22. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner.

## ARTICLE 23. ASSIGNMENT

Neither this Agreement nor any interest arising under it will be assigned by the Partner or NASA without the express written consent of the officials executing, or successors, or higher- level officials possessing original or delegated authority to execute this Agreement.

## ARTICLE 24. APPLICABLE LAW

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the Agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

## ARTICLE 25. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect to or otherwise recognize a joint venture, partnership, or formal business organization, or agency agreement of any kind, and the rights and obligations of the Parties shall be only those expressly set forth herein.

## ARTICLE 26. LOAN OF GOVERNMENT PROPERTY

The parties shall enter into a NASA Form 893, Loan of NASA Equipment, for NASA equipment loaned to Partner.


ARTICLE 27. SIGNATORY AUTHORITY

The signatories to this Agreement covenant and warrant that they have authority to execute this Agreement. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION  
GODDARD SPACE FLIGHT  
CENTER

HOWARD UNIVERSITY

BY: \_\_\_\_\_  
Mark Clampin  
Director of Sciences and Exploration

BY:  \_\_\_\_\_  
Dana C. Hector  
Executive Director, RAS

DATE: \_\_\_\_\_

DATE: 1/11/2022